

CLAIMS

1. System for detachable joining of beams (2) with square and/or rectangular cross-section for respective beam comprising two or more fixing plates (1) mounted in pairs on opposite sides of the beam and fixed along the beam by a friction joint maintained by tightening bolts (3, 9), whereby respective fixing plate comprises a first surface (21), the extension of which in at least one direction corresponds to a multiple of one beam width and a second surface (30) turned away from the beam, **characterised in** that two or more beams are arranged to be joined in perpendicular and/or parallel directions by at least two opposite to each other arranged fixing plates (2), which are organized to bear on each other along the respective second surface (30) and whose mutual positions are fixed by locking elements (6, 13) in recessions (10) in the each other facing sides (30) of the fixing plates and which locking elements also constitute anchoring of the tightening bolts.
2. System according to claim 1, whereby the locking elements are made of inner threaded sleeves (6).
3. System according to claim 2, whereby the fixing plate comprises projections (26) arranged at respective corner of the plate.
4. System according to claim 3, whereby stop screws (5), extending from the projections (26) are arranged to fix the position of the beams in a transverse direction in the friction joint, whereby a shape determined locking of the beams is achieved.
5. System according to claim 3, whereby wedges (27), extending from the projections (26) are arranged to fix the position of the beams in a transverse direction in the friction joint, whereby a shape determined locking of the beams is achieved.
6. System according to any of the claims 2-5, whereby the sleeves (6, 12, 13) have longitudinal slots (17).
7. System according to any of the proceeding claims, whereby the beams (2) are tubular beams.